

feedback signal which represents a composite of the thermal energy detected from the selected site of a collagen containing tissue and from the fluid medium; and

a feedback control system that includes a programmable microprocessor having a controlled collagen contraction program, wherein the programmable processor is coupled to the energy delivery device and the sensor, wherein a position of the sensor, and a geometry of the distal portion of the energy delivery device and are received as input to the controlled collagen contraction program to direct the programmable microprocessor in the feedback control system to provide a controllable energy delivery to the selected site of the collagen containing tissue.

31.46. An apparatusA computer system for contracting collagen fibers in a selected site of a collagen containing tissue which is adjacent to a fluid medium, comprising:

an energy delivering device including a proximal portion and a coaxial distal portion configured to be guided and positioned at an interface between the fluid medium and the selected site, and to provide a selected thermal distribution in the selected site and effect that effects a controllable contraction of at least a portion of the selected site of the collagen containing tissue, the coaxial distal portion coaxial with the proximal portion;

a sensor positioned in an interior of the distal portion of the energy delivery device to detect a thermal energy from the selected site and from the fluid medium, the sensor producing a thermal feedback signal which represents a composite of the thermal energy detected from the selected site of a collagen containing tissue and from the fluid medium; and

a feedback control system that includes a programmable microprocessor having a controlled collagen contraction program, wherein the programmable processor is coupled to the sensor, wherein a position of the sensor, and a geometry of the distal portion of the energy delivery device and are received as input to the controlled collagen contraction program to direct the programmable microprocessor in the feedback control system to provide a controllable energy delivery to the selected site of the collagen containing tissue.

47. 32. An apparatusA computer system for effecting a change in at least a portion ofcontracting collagen fibers at a selected site of a collagen containing tissue that is adjacent to a fluid medium, comprising:

an energy delivery device including a proximal portion and a coaxial formed with a distal portion with blunt periphery guidable and positionable in for contact with a surface of the selected site without penetrating the surface of the selected site, and configured to deliver sufficient a predetermined level of energy to the selected site without penetrating the surface of the selected site, and configured to deliver sufficient energy to the selected site to effect a contraction in at least a portion of the selected site of the collagen containing tissue, the coaxial distal portion coaxial with the proximal portion;

a sensor positioned in an interior of the distal portion of the energy delivery device to detect a thermal energy from the selected site and from the fluid medium, the sensor producing a thermal feedback signal which represents a composite of the thermal energy detected from the selected site of a collagen containing tissue and from the fluid medium; and

a feedback control system for providing controllable energy delivery to the selected site that includes a programmable microprocessor with a controlled collagen contraction program, wherein the programmable microprocessor is coupled to the energy delivery device and the sensor to controllably adjust the thermal distribution provided by the energy delivery device based on instructions from the controlled collagen contraction program and the thermal feedback signal from the sensor and configured to receive the thermal feedback signal and adjust a level of energy delivered to at least the portion of the selected site of the collagen containing tissue.

48. 33. The apparatus of claim 4732, further comprising wherein the energy delivery device is constructed from platinum.:

an electrical insulator positioned at least partially around an exterior surface of the energy delivery device; and

a thermal insulator positioned at least partially around an exterior surface of the energy delivery device.

49. 34. The apparatus of claim 3247, further comprising: wherein the energy delivery device is constructed from stainless steel.

a thermally insulating material coupling the sensor to an exterior surface of the distal portion.

50. 35. The apparatus of claim 3247, wherein the energy delivery device is constructed from memory metal. further comprising:

a thermally conductive material coupling the sensor to an exterior surface of the distal portion.

51. 36. The apparatus of claim 3247, wherein the energy delivery device is a composite construction. sensor is a band at least partially positioned on an exterior surface of the distal portion.

52. 37. The apparatus of claim 3651, wherein a component of the composite construction does not conduct energy delivered by the energy delivery device. further comprising:

a thermal insulator positioned at least partially around an exterior surface of the energy delivery device.

53. 38. The apparatus of claim 3247, wherein the energy delivery device is an RF energy delivery device coupled to an RF energy source.